

REMARKS

Applicants thank the Examiner for withdrawing the double patenting rejections and the rejections on Wolfe and Pierini.

Applicants have amended claim 1 to remove the "without a matrix" language, thus overcoming the rejections under 35 USC 112, first and second paragraphs, without narrowing the scope of the claims in this respect and without conceding the correctness of the rejections.¹ Applicants have also amended claim 1 to move the "ballistic resistance" language to the body of the claim, thus overcoming any unintended reading of claim 1 as extending to fabrics and clothing articles which do not have ballistic resistance properties. Finally, applicants have amended claim 1 to incorporate the denier range for ballistic resistant articles used as soft armor disclosed at page 10, line 33 - page 11, line 1, of the specification. Entry of these amendments, which overcome the rejections of record and otherwise serve to put the application in better condition for appeal, is respectfully requested.

Claims 1-10 and 13-15 remain rejected under 35 USC 102(e) as being anticipated by Weber. This rejection is respectfully traversed.

The Examiner asserted that claims 1, 13 and 15 are anticipated because "Weber et al disclose fabrics containing polybenzoxazole polymer fibers." Action, page 3. The Examiner also commented, "However, this argument [that Weber does not teach a ballistic resistant article] is not persuasive because the material of Weber would necessarily have some ballistic resistance." Action, page 4. Applicants respectfully submit that the record supports neither of these conclusions and that the rejection of claims 1-10 and 13-15 on Weber should be withdrawn.

¹ The Examiner stated in the Action that this application does not support the negative limitation "without a matrix." Applicants had already pointed to the disclosure in the specification, which states at page 12, lines 3-4, that "the fabric may be used alone or may be embedded in a matrix to form a rigid panel." The sense of this passage is that the fabric may be used with or without a matrix, rebutting the Examiner's assertion that "[t]he mere absence of a positive recitation is not basis for an exclusion."

As applicants have explained previously in the prosecution of this application, the cut resistant article Weber describes is not the same as the claimed ballistic resistant article, so that Weber would not put persons of ordinary skill in the art in possession of the claimed ballistic resistant fabric or clothing article. For that reason alone, Weber cannot anticipate the claims in this application.

A ballistic force causes a tensile force that acts on the filaments of the article. Ballistic resistant articles are designed to have the largest possible deformable area in order to improve absorption of the impact of a bullet or other such ballistic projectile. Ballistic resistant articles are typically made of a fabric comprising filaments or an alternate laminate of unidirectional filament sheets and are designed by optimizing the tensile strength of the lengthwise filaments of the article. By contrast, a cut resistant garment is typically made of a felt or a cloth using a yarn of discontinuous fibers, which has a bulky structure preventing easy penetration of edge tools. When a cut resistant garment like that disclosed in Weber exhibits cut resistance, a shearing force, rather than a tensile force, acts on the filaments constituting the garment. The tensile strength of the filaments does not directly affect the cut resistance of the garment, but the shear strength does. Weber does not provide any information that would have told persons of ordinary art how to make a ballistic resistant article and thus does not anticipate the claims in this application.

Weber further does not disclose or suggest that the PBO fibers be of not more than 500 denier, as claimed. The Examples of Weber only disclose the use of yarns of 1000 or 1100 denier and do not suggest any reason to use the claimed filaments.

Applicants also submit that the Examiner has failed to present any factual basis or technical reasoning to support the conclusion that Weber's fabric or clothing article "would necessarily have some ballistic resistance." This is a finding of inherent disclosure, which requires the Examiner to put forth facts or technical reasoning sufficient to shift the burden of proof to the applicants; it is not enough that a claimed characteristic may occur or be present in

the prior art. MPEP 2112, pages 2100-51 and 52. All that the Examiner has done is to present a supposition, without any evidence or analysis in the record to back it up.

Accordingly, the Examiner should withdraw the rejection of claims 1-10 and 13-15 as anticipated by Weber.

Claims 1-8 and 13-15 stand rejected under 35 USC 102(e) as being anticipated by Pepin. This rejection is respectfully traversed on the ground that Pepin does not disclose or suggest that the PBO fibers are of no more than 500 denier. The fiber described in the Examples, Kevlar 29 style 745, is 3000 denier fiber, and there is nothing in Pepin which would have motivated a person of ordinary skill in the art to use the much finer fibers claimed.

For the foregoing reasons, allowance of claim 1-15 in this application is solicited.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing 358362001101.

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Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Amend claim 1 as follows:

1. (Twice Amended) A [ballistic-resistant article comprising a] fabric or clothing article [without a matrix, which is] made of a [yarn of] plurality of polybenzoxazole polymer fibers, wherein said article has ballistic resistance suitable for use as soft armor and the fibers are of no more than 500 denier.